AMENDMENTS TO THE CLAIMS

Please amend the claims so that they read as follows:

1. (Original) A flame retardant polymer composition comprising

a) 20 - 60 percent by weight of a thermoplastic and/or crossed linked or cross-linkable elastomer and

b) as a flame retardant agent 40 - 80 percent by weight either of an aluminium hydroxide with the material values

- specific surface according to BET 3 - 5 m^2/g
- mean grain size d_{50} 1.0 - 1.5 µm
- residual moisture 0.1 - 0.4%
- oil absorption 19 - 23%
- water absorption 0.4 - 0.6 ml/g

or of an aluminium hydroxide with the material values

- specific surface according to BET 5 - 8 m^2/g
- mean grain size d_{50} 0.8 - 1.3 µm
- residual moisture 0.1 - 0.6%
- oil absorption 21 - 25%
- water absorption 0.6 - 0.8 ml/g.

2. (Original) The flame retardant polymer composition of claim 1, wherein the aluminum hydroxide has a gibbsite structure with, additionally, 0.5 to 1.5% boehmite.

3. (Original) A flame retardant polymer composition according to claim 1, wherein the polymer described under a) consists of the group of polyolefins, vinyl polymers, copolymers or terpolymers and grafted polymethylacrylate, natural and synthetic rubbers and their mixtures.

4. (Original) A process for producing a flame retardance agent, the flame retardant agent comprising.

(I) an aluminum hydroxide having:

(i) a BET specific surface area of 3 - 5 m^2/g,

(ii) a mean grain size d_{50} of 1.0 - 1.5 μm,

(iii) a residual moisture of 0.4%,

(iv) an oil absorption of 19 - 23%, and,

(v) a water absorption of 0.4 - 0.6 ml/g; or

(II) an aluminum hydroxide having:

(i) a BET specific surface area of 5 - 8 m^2/g,

(ii) a mean grain size d_{50} of 0.8 - 1.3 μm,

(iii) a residual moisture of 0.1 - 0.6%,

(iv) an oil absorption of 21 - 25%, and,

(v) a water absorption of 0.6 - 0.8 ml/g;

comprising mill drying a filter-moist aluminum hydroxide having a mean grain size of 0.8 to 1.5μm obtained by precipitation and filtration in a turbulent hot air stream.

5. (Original) The process of claim 4, wherein the mill drying is effected by passing the filter-moist aluminum hydroxide in a hot air stream at a throughput of 3000-7000 Bm^3/h through a rotor rotating at a circumferential speed of 40 - 140 m/sec, and whirling the hot air stream at a temperature of 150 - 450°C at a Reynolds factor greater than 3000.

6. (Original) The process of claim 5, wherein the circumferential speed of the rotor is greater than 60 m/sec, thereby converting agglomerates contained in the filter-moist aluminum hydroxide into primary crystals.

7. (Original) The process of claim 6, wherein the energy introduced in the hot air stream is in excess of 5000 Bm^3/h, at a temperature greater than

270°C and a circumferential speed of the rotor greater than 70m/sec, thereby converting the gibbsite particles on the surface of the flame retardant agent into boehmite.

8. (Original) A method of producing coated electrical conductors and cables comprising extruding the flame retardant polymer composition of claim 1.

9. (Currently Amended) The method of claim 4 wherein after mill drying, the filter-moist aluminum hydroxide d_{50} grain distribution is ~~largely retained~~ within about 15% of its original value, and the BET surface is increased by at least 20%.

10. (Original) The composition of claim 3, wherein the melt flow index of the polymer composition is increased by at least 20% compared to standard aluminum hydroxides.